# Week 3 Quiz/code

1. Given the spreadsheet setup shown below, what is the value of the following line of code?

**ActiveCell.Offset(-2,1) = ?**

|   | A | B | C | D |
|---|---|---|---|---|
| 1 | 1 | 2 | 3 | 4 |
| 2 | 5 | 6 | 7 | 8 |
| 3 | 9 | 10 | 11 | 12 |
| 4 | 13 | 14 | 15 | 16 |
| 5 | 17 | 18 | 19 | 20 |

- ⚪ 16
- 🔘 19
- ⚪ 3
- ⚪ 8

⊗ **Incorrect**
Incorrect. In the **ActiveCell.Offset(r,c)** statement, **r** is the number of rows that we offset from the active cell and **c** is the number of columns that we offset from the active cell. As a hint, the active cell is cell **B3** here.

2. Given the spreadsheet setup shown below, what is the value of the following line of code?

**Selection.Range("A2") = ?**

|   | A | B | C | D |
|---|---|---|---|---|
| 1 | 1 | 2 | 3 | 4 |
| 2 | 5 | 6 | 7 | 8 |
| 3 | 9 | 10 | 11 | 12 |
| 4 | 13 | 14 | 15 | 16 |
| 5 | 17 | 18 | 19 | 20 |
| 6 | 21 | 22 | 23 | 24 |

○ 19
◉ 14
○ 5
○ 11

✓ **Correct**
Correct! When **Range("A2")** follows another property, like **Selection**, that means it's referring to a sub-property of the **Selection**. Therefore, we are referring to cell **A2** of the **Selection**, which is cell **B4**. Cell **B4** has a value of 14.

**3.** Given the spreadsheet setup below and if the user enters 2 in the input box, what cell will be the active cell after the **WhatWillHappen** subroutine is run?

1 p

| | A | B | C | D |
|---|---|---|---|---|
| 1 | 4 | 5 | 3 | 1 |
| 2 | 2 | 3 | 5 | 1 |
| 3 | 5 | 3 | 6 | 2 |
| 4 | 3 | 5 | 1 | *D4* *2* |
| 5 | 5 | 1 | 2 | 3 |
| 6 | 5 | 2 | 4 | 5 |
| 7 | 4 | 4 | 5 | 5 |

```
Sub WhatWillHappen()
Dim y As Integer
y = InputBox("Please enter a number:")
ActiveCell.Offset(1, Selection.Cells(3, y)).Select
End Sub
```

○ A2
◉ D4
○ B3
○ C5

✓ **Correct**
Correct! **Selection.Cells(3,y)** will result in **Selection.Cells(3,2) = 2** when 2 is input into the input box. This will make the **ActiveCell.Offset** statement --> **ActiveCell.Offset(1,2)**, which corresponds to cell **D4** since the current active cell is **B3**. Therefore, cell **D4** will become the active cell.

**4.** Which of the following VBA statements on the left side of the arrow are _correctly_ paired with a description of that statement on the right side of the arrow? Multip answers are possible. HINT: 2 of the 4 are correct.

☑ **FormatNumber(x,1)** --> formats x to the hundredths place

⊗ **This should not be selected**
Incorrect. This will format x to the tenths place. The second argument of the **FormatNumber** function corresponds as follows: -2 = hundreds place, -1 = tens place, 0 = ones place, 1 = tenths place, 2 = hundredths place (and so on...).

☑ **Range("B2:C9").Select** --> Select cells **B2:C9** on the current worksheet

⊘ **Correct**
Correct! This statement will select cells **B2:B9** on the current worksheet.

☐ **ActiveCell.Offset(-1,0).Clear** --> Erase the contents of the cell just below the single cell selected on the current worksheet

☐ **nCols = Selection.Columns.Count** --> Assign to a variable **nCols** the number of columns in the selected block of cells on the current worksheet

**4.** Which of the following VBA statements on the left side of the arrow are _correctly_ paired with a description of that statement on the right side of the arrow? Multiple answers are possible. HINT: 2 of the 4 are correct.

☐ **ActiveCell.Offset(-1,0).Clear** --> Erase the contents of the cell just below the single cell selected on the current worksheet

☑ **Range("B2:C9").Select** --> Select cells **B2:C9** on the current worksheet

⊘ **Correct**
Correct! This statement will select cells **B2:B9** on the current worksheet.

☐ **FormatNumber(x,1)** --> formats x to the hundredths place

☑ **nCols = Selection.Columns.Count** --> Assign to a variable **nCols** the number of columns in the selected block of cells on the current worksheet

⊘ **Correct**
Correct! This is how we can determine the number of columns in a selection.

**5.** Which of the following is output in the message box when the **ErrorOops** sub is run but the Cancel button on the input box is clicked?

```
Option Explicit

Sub ErrorOops()
Dim a As Integer, y As Integer
On Error GoTo There
y = 2
a = InputBox("Please enter a number:")
MsgBox a ^ 2
Exit Sub
Here:
y = y + 1
MsgBox y
Exit Sub
There:
y = y + 2
GoTo Here
End Sub
```

○ 9

⊘ **Correct**
Correct! When the **Cancel** button is pressed, this causes an internal error. Because of the **On Error GoTo There** statement, the VBE jumps down to line 13/14 and **y = y + 2** --> y becomes 4. Next, the **GoTo Here** statement causes the VBE to jump up to line 8/9, and **y = y +1** --> y becomes 5.

```vba
'Sub test4()
'ncols = Selection.Columns.Count
'will give error ncols not defined
'End Sub

Sub erroroops()
Dim a As Integer, y As Integer
On Error GoTo there
y = 2
a = InputBox("Please enter a number:")
MsgBox a ^ 2
Exit Sub
here:
y = y + 1
MsgBox y
Exit Sub
there:
y = y + 2
GoTo here

End Sub
```